Amendment to the Claims

1-2.   (Cancelled)

3.   (Currently Amended) A method of oversubscribing a group of M DSL modems comprising the steps of:

(a)   connecting the group of M DSL modems to a ~~first~~ set of <u>corresponding</u> M ~~Customer Premise Equipment~~ <u>customer premise equipment</u> devices;

(b)   connecting a group of P OAM/EOC modems to a ~~first~~ set of <u>corresponding</u> P ~~Customer Premise Equipment~~ <u>customer premise equipment</u> devices;

(c)   transferring user traffic data between the group of M DSL modems and the ~~first~~ set of <u>corresponding</u> M ~~Customer Premise Equipment~~ <u>customer premise equipment</u> devices; ~~and~~

(d)   transferring synchronization data between the group of P OAM/EOC modems and the ~~first~~ set of <u>corresponding</u> P ~~Customer Premise Equipment~~ <u>customer premise equipment</u> devices<u>;</u>

(e)   <u>dynamically reconfiguring the connections to the set of M customer premise equipment devices and P customer premise equipment devices such that at least one device of the set of P customer premise equipment devices is connected to one DSL modem of the group of M DSL modems so user traffic data may be transferred between the at least one device of the set of P customer premise equipment devices and the one DSL modem of the group of M DSL modems, and such that at least one device of the set of M customer premise equipment devices is connected to one OAM/EOC modem of the group of P OAM/EOC modems so the at least one device of the set of M customer equipment devices remains in a state as if it was connected to a DSL modem.</u>

4.   (Cancelled)   The method of Claim 3 further comprising the steps of:

(e)   connecting the group of M DSL modems to a second set of M Customer Premise Equipment devices, wherein at least some of the second set of M Customer Premise Equipment devices are members of the first set of P Customer Premise Equipment devices;

(f)   connecting the group of P OAM/EOC modems to a second set of P

Customer Premise Equipment devices, wherein at least some of the second set of P Customer Premise Equipment devices are members of the first set of M Customer Premise Equipment devices;

(g)   transferring user traffic data between the group of M DSL modems and the second setoff M Customer Premise Equipment devices; and

(h)   transferring synchronization data between the group of P OAMEOC modems and the second set of P Customer Premise Equipment devices.

5.   (Currently Amended) The method of Claim ~~4~~ 3 further comprising the step of: determining the ~~first and second~~ sets of M and P ~~Customer Premise Equipment~~ customer premise equipment devices at least in part via RTS/CTS signals.

6.   (Currently Amended) The method of Claim 5 further comprising the step of: embedding the RTS/CTS signals within superframes.

7.   (Previously Presented) The method of Claim 3 wherein the bandwidth requirements of the synchronization data is less than about 1 percent of that of the user traffic data.

(8)   (Currently Amended) The method of Claim 3, further comprising the step of:~~;~~

stopping the transfer of user traffic data for a DSL modem of the group of M DSL modems connected to a ~~Customer Premise Equipment~~ customer premise equipment device of the first set of M ~~Customer Premise Equipment~~ customer premise equipment devices when at least one of the following condition are met: ~~Time Out~~ time-out, or ~~No More Data~~ no-more-data.

9.   (Currently Amended) A system for oversubscribing a group of M DSL modems comprising:

an interface coupled between the group of M DSL modems and an upstream data link;

a group of P OAM/EOC modems in communication with the group of M DSL modems; and

a switch connected to a plurality of N̲ downstream data links, the group of M DSL modems, and the group of P OAM/EOC modems, a first downstream data link of the plurality of N̲ downstream data links being coupled to a ~~Customer Premise Equipment~~ customer premise equipment device, wherein full data rate transmission is achieved such that user traffic data is transferred over the first downstream data link between the ~~Customer Premise Equipment~~ customer premise equipment device and the upstream data link via one of the group of M DSL modems, and a second downstream data link of the plurality of N downstream data links being coupled to a customer premise equipment device, wherein synchronization data is transferred over ~~the first~~ a second downstream data link between the ~~Customer Premise Equipment~~ customer premise equipment device via ~~and~~ one of the group of P OAM/EOC modems such that the customer premise equipment device remains in a state as if connected to a DSL modem; and

wherein the switch dynamically reconfigures customer premise equipment device connections such that at least one of the plurality of customer premise equipment devices is connected to either one of the group of M DSL modems or to one of the group of P OAM/EOC modems.

10.   (Currently Amended) The system of Claim 9 further comprising means for communicating RTS/CTS signals between the ~~Customer Premise Equipment~~ customer premise equipment device and either one of the group of M DSL modems or one of the group of a P OAM/EOC modems.

11-15. (Cancelled)

16.   (Previously Presented) The system of Claim 9, wherein one or more of the plurality of N downstream data links comprises a POTS line.

17.   (Currently Amended) The system of Claim 9, wherein the upstream data link comprises: a POTS line, optical fiber, a twisted pair conductor, the ~~Public Switched Telephone Network~~ public switched telephone network, a T1 connection, a T3 connection, an ISDN connection, a coaxial cable, an SHDSL link, an ADSL link, a VDSL link, an HDSL link, a V.90 link, or an OCn link.

18.   (Previously Presented) The system of Claim 9, wherein M+P=N, and wherein P is at least 1.

19.   (Currently Amended) ~~A~~ A method for oversubscribing a group of M DSL modems, comprising the steps of:

(a)   connecting a ~~Customer Premise Equipment~~ customer premise equipment device, according to the priority and order of a request from the ~~Customer Premise Equipment~~ customer premise equipment device, either to ~~a~~ one of the group of M DSL modems or to an OAM/EOC ~~Modem~~ modem;

(b)   transferring user traffic data for the ~~Customer Premise Equipment~~ customer premise equipment ~~devices~~ if the ~~Customer Premise Equipment~~ customer premise equipment device is connected to ~~a DSL Modem, data, otherwise if connected to an OAM/EOC Modem, transferring synchronization data~~ one of the group of M DSL modems;

(c)   transferring synchronization data for the customer premise device if the ~~Customer Premise Equipment~~ customer premise equipment device is connected to ~~an~~ the OAM/EOC ~~Modem~~ modem;

(d)   determining whether a ~~Time-Out~~ time-out or a ~~No-More-Data~~ no-more-data condition exists if the ~~Customer Premise Equipment~~ customer premise equipment device is connected to one of the group of M ~~a~~ DSL ~~Modem~~ modems; and

(e) if a ~~Time-Out~~ the time-out or ~~No-More-Data~~ no-more-data condition exists, repeating steps ~~(a)-(e)~~ (a)-(d), otherwise repeating steps ~~(b)-(e)~~ (b)-(d).

20.   (New) The method of Claim 19 wherein the connection of the customer premise equipment device to either the one of the group of M DSL modems or to the OAM/EOC modem is done at least in part in response to RTS/CTS signals.

21.   (New) The method of Claim 20 further comprising the step of embedding the RTS/CTS signals within superframes.

22.   (New) The method of Claim 19 wherein the bandwidth requirements of the synchronization data is less than about 1 percent of that of the user traffic data.